

ASP

See Page 2

# COMPUTERWORLD

The Newsweekly for the Computer Community

Employment  
Agencies-  
Good or Bad?

See Page 7

Vol. 1 No. 5

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## Any Good Programs To Sell? Software Marketing Firm Commences Operations

LOS ANGELES, Sept. 8 - A new company has been formed specifically to find, test, and sell software that other people write. And it is already in operation selling a COBOL-TO-COBOL translator to people who are moving from IBM 7000's to 360's, a banking credit card accounting system, etc.

The firm's name is Software Resources, headquartered in Los Angeles. The president is Bob Head, formerly with Computer Sciences, who has been in data processing for about twelve years. Programs are obtained from users or from software houses, and Software Resources adds its marketing capabilities to the technical abilities of the supplier. Then, packaged up, the programs are offered for sale, and installed at the customer's premises by Software Resources' technical people. Postinstallation support where appropriate is handled by Software Resources with recourse to the original supplier.

As far as payments for the software are concerned, Bob Head told COMPUTERWORLD today, this is a real difficulty. "We don't have any precedents to guide us," was his comment. "Some people are urging us not to spoil the market by charging too low a figure. It's going to take time to work out."

His prospects look good seen from the inside. With two months' operations under his belt he is enthusiastic about the prospects.

Have you any good programs to sell?

### NEW COMPUTER ROOM SHREDDER

A new shredder for the destruction of confidential waste which specializes in the material used in computer rooms has been introduced. Called the 1967/68 Compact Conveyor Destroyit Paper Shredder, and marketed by Electric Wastebasket Corporation, New York 10036, it allows punched cards to be fed two or three abreast. Production capacity is 1500 lbs. an hour, and the unit includes a conveyor belt.

### Savings By Tax Reports On Tape

Tax reporting on magnetic tape is now accepted by the Internal Revenue Service for employers' tax returns. The IRS has revealed that some 450 firms took advantage of this new facility to make their 1966 reports, and so saved themselves considerable manual effort.

The 450 companies concerned, however, were only a small portion of the installations which could have used this method. It is believed that lack of knowledge of the facility, as much as the problem of preparing the tape itself, was the reason so few used the method. It is anticipated that in view of the savings in data-processing, paper and shipping costs which can be realized, more installations will submit tax tape in future years.



New York, New York, September 5, 1967 ... Completion of the private financing of Diebold Computer Leasing, Inc.: (standing from left to right): George Montgomery, Partner, White, Weld & Co., Gilbert R. H. Kennedy, Executive Vice President and Richard Urfer, President, Diebold Computer Leasing, Inc., Larry Leighton, Kuhn, Loeb & Co., and seated, John Diebold, Chairman, John Diebold Incorporated, and Herman Staton, V.P., Commercial Credit Company.

## Diebold Enters Leasing 26% Savings Claimed

In a dramatic development which may allow DP users to save up to 26% of their hardware costs, John Diebold and the Bankers Leasing Corporation joined hands to form a leasing company which initially will have some \$85 million behind it - and which expects to expand rapidly.

Computer users in Fortunes 500 (or similar organizations) can expect to be approached shortly by the sales representatives of Bankers Leasing with offers for financing services which incorporate the provision of top-level legal and tax expertise to arrange details of leasing. Mr. Alvin Zises, President of Bankers Leasing, estimates that on a cash-flow basis his organization can save a client 26% over a two-year period as compared with rentals from the computer manufacturer. The estimates are based on a cash-flow computation.

The Diebold EDP expertise is to be used by the new organization so that the whole application area can be evaluated. (For further details see Page 6.)

## Human Rights Periled By Computers, Report Claims

NEW YORK, September 5 - In a front-page article today in the New York Times, computers were singled out as a potential peril to human rights. The article reported on the 46-page report entitled "The United Nations and Human Rights" issued by the Commission to Study the Organization of Peace. The Commission, although it is an unofficial body, includes a number of experts on International Law, including Professor Louis B. Sohn, Bemis Professor of Law at Harvard.

### The Precious Few

In an argument which seemed to call for special legislation to control operators (or perhaps programmers) the report said that "arrangements will have to be devised to control the precious few who know how to run the machines," and expressed the fear that decision-making will be taken away from

legislatures and given to people who feed the data to computers.

### Military & Civilian Rights Involved

The report was concerned with the influence of computers in both the military and civilian spheres. It noted that many military decisions already depend on answers given by computers, and contended that only red tape was presently protecting the individual from the horrors of having his record easily available to authorized people. Regarding the present controversy over the proposed National Data Bank, the authors felt that such an operation would "raise the specter of a government which knows all".

### Urges Study of the Problem

The authors urge that the United States support the establishment of some new United Nations-connected body to study the problem.

## Non-IBM Disk-Packs Here

### Memorex Field Test Are Successful

Memorex Corporation confirmed today that they had started delivering disk packs to their customers, on both the East and West coasts, and to many of the computer manufacturers. The deliveries started early in September, after concluding field tests of the new product on IBM 1311 and 2311 equipment. Users who had participated in the field tests told COMPUTERWORLD that the disks appeared to be excellent in quality, and were being used interchangeably with IBM disk packs.

The appearance of a second-source supplier for disk packs may somewhat alleviate the present shortage, but it appears unlikely to altogether end it. At present, disk packs can be rented for approximately double the IBM rental charge on the open market. The demand is rising both because of under-ordering by disk pack users and delays in supplies being made available by IBM.

than the IBM design, and to the clearer labeling facilities.

### FIELD TEST SITE COMMENTS

In checking out these points with actual users of the disks, COMPUTERWORLD found that while the improvement in the redesigned case was accepted, there were now few problems with breakage as operators nowadays knew how to handle the cases. The prime attraction of the new disks lay in their availability and usability. "They gave us four," said one DP manager, "and when we initialized them we did not have to have any alternate track assignments. We are using them both for work-disks and for systems-residence, and we have had no drop-outs."

By comparison, he quoted his experience with IBM, where an order of disks which they had expected to be completed in March 1967 is still incomplete - by some 17 packs. IBM had supplied him with used packs, but the installation had had to reject four out of the six supplied.

He attributed the inordinate demand for disk packs primarily to underestimation of the actual need which becomes apparent AFTER the systems are in operation - when it is too late to

CONTINUED ON PAGE 3



**SMALLEST IBM COMPUTER GETS GRAPHICS DISPLAY:** This new model of the IBM 2250 - an advanced graphics display unit - permits users to exchange visual information with IBM's lowest-cost computing system, the desk-sized IBM 1130 (right)

## Software For Sale

Since late last year, the number of software for sale packages offered has been steadily increasing. Installations which have sold software are profiting from the income - firms have been formed to provide packages which are wanted - the General Services Administration has put them on the US Government's buying list - and prizes have been awarded to those of exceptional merit.

In fact, quite an industry is growing up in our midst. Now comes the next step. A firm which does not specialize in producing software - but in MARKETING software. One which grapples with contractual matters, brochures, installation problems, etc.

It's a step which has been forecast many times - but the reality is only just appearing now. Our news pages cover the story of one such firm - SOFTWARE RESOURCES of Los Angeles. There may be others. There certainly will be more soon. They are welcome, for they have much to provide.

## Welcome To More Competition-- It Helps To Cover Our Failures

The arrival of MEMOREX on the scene as a disk-pack supplier will be particularly welcomed by the data-processing user. Not just because it adds competition, (although competition among vendors is always nice), but because it helps to cover our own failure.

Estimating the number of diskpacks which will be needed has never been easy. The estimate must be conservative - because of the hundreds of dollars each disk costs. The estimates must be made well ahead - because of delivery problems. And they are often made on the basis of other peoples' guesses.

The record shows just how far off the estimates are. Frankly, they are often failures. Failures which can or by the ability to get disk packs quickly when needed. Here's to more competition in the disk pack field!

## Isn't This Our Affair?

Financial matters to do with the computer installation are often ignored by the technical management. Points as to whether to buy or lease, how to dispose of old computers, where to get supplies etc., are handled either in the controller's office, or by the path of least resistance.

And yet much money is involved. Money which is already allocated to the data-processing budget - money which could be used to improve the quality of service which the computers could give.

Our front-page story on the new Diebold Leasing company underlines the amount of money involved. And the fact that money is not a dirty subject which real technical guys should avoid. Mr. Alvin Zises of the new concern estimates that they can cut the cash flow on the hardware by 26% in normal cases. 26%!

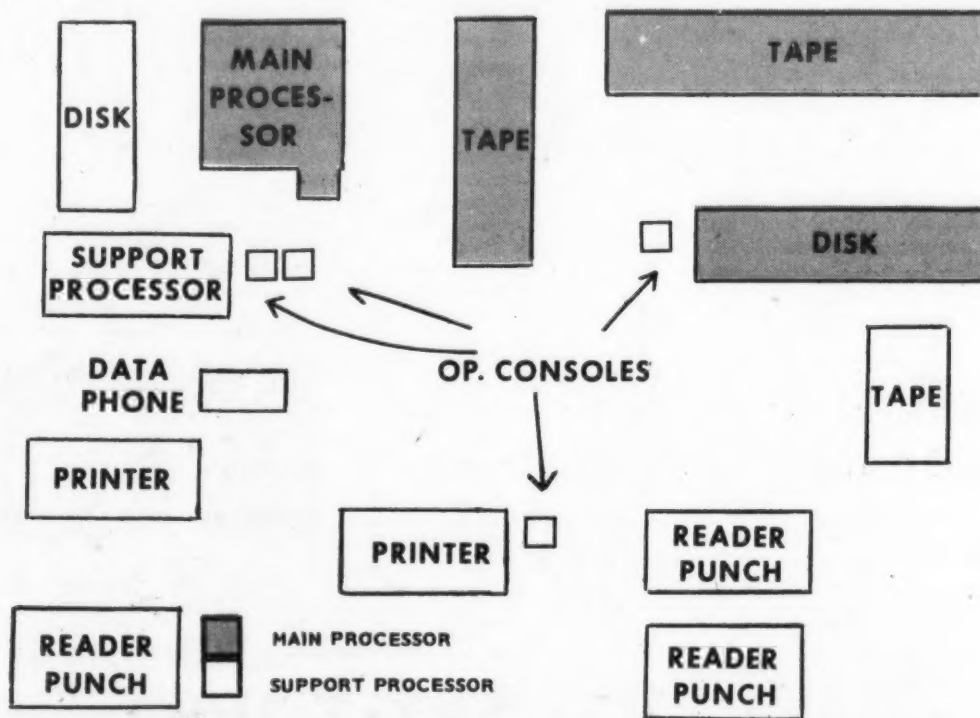
Hmm, that's a lot of dough.

What are YOU doing about seeing that money in your installation is not being wasted in your buying methods - and seeing that any available savings are kept in the data-processing budget? THIS IS OUR AFFAIR.

## Attached Support Processor (ASP)<sup>®</sup>

ASP is a spreading technique for improving computer utilization. In essence, it breaks the work up into two areas - the computation area and the input/output and editing area. In the pure form of ASP, these are handled on two different computers, the "Main" Processor and the "Support" Processor, as shown in the diagram. (In other versions, these two processors need only be logically different, and can in fact be the same physical system.)

In all cases, however, the basic advantages and problems are the same. In the following article (derived from a talk at the August 1967 SHARE meeting by Richard V. Bergstresser of the IBM ASP Development Center, Los Angeles) the current status of ASP is presented. It is reported here because COMPUTERWORLD feels that the ASP technique is one which should be more widely known.



## REPRESENTATIVE ASP INSTALLATION

The significant feature of the ASP (Attached Support Processor) is in the automation of the machine room.

The automation is accomplished by:

1. Handling a job from its entry into the card reader through its execution, and the preparation of its printed and/or punched output.
2. Handling the "pre-set-up" jobs involved in scheduling the equipment so that as many jobs as possible are executed as soon as possible.
3. Handling carry-over jobs which have not been programmed for the 360, but are carried over from a 7090 operation.
4. Providing operator control and programmer inquiry consoles.
5. The provision of special utility programs such as card reproduction, tape printing, etc.

Conceptually, an installation has three centers of operation. The peripheral operation would be controlled from one console; tape and disk set-up operations from another, and a third center - with two consoles - would handle Main Processor execution and at the same time monitor total operation.

Besides controlling the various processing functions from these terminals, an operator has the facility to perform any of the following functions:

† Alter job priority at any stage of processing.

† Cancel a job from a processing step or from the system.

† Display a summary of the system backlogs by major function.

† Display an itemized list of the job queue for a specific function such as Main Processor execution.

† Display a printout of the entire job queue.

† Display the status of any one job in the system.

† Display the status of the disk queue space to determine how fully loaded the system is.

These give the operator control of the system, and also provide a convenient means for a programmer to learn the status of his job. Some installations have taken advantage of this by placing a console for the purpose of inquiry, in an area which is accessible to all programmers so that they may satisfy their curiosity regarding the status of their jobs.

To date IBM has been unable to perform a rigorous performance analysis of the ASP system. The system appears to be running very stably, with Main Processor utilization apparently very high. With the establishment of a Development Center in Los Angeles, the ASP Project is now in a position to start studying performance. IBM has plans for conducting a series of hardware and software analyses in the months to come.

## ANOTHER STATE CONTRACT TO LOCKHEED

Lockheed Space and Missile Division this week won its third contract to develop an embracing EDP program for one of the states when West Virginia signed a contract for setting up EDP services. Similar services have been provided by Lockheed for California and Alaska.

In the case of West Virginia, the first phase of a long-range program for the establishment of an information system linking all of the state's major departments and agencies.

Linkage between the various agencies — justice, economic development, etc. — will be through a central EDP facility which is to be established. The establishment of this facility will be the initial operation, and will be followed by the provision of the remote linkages to the separate agencies.

## POTTER REPORTS RECORD EARNINGS

PLAINVIEW, N.Y., Sept. 11 — Potter Instrument Company has reported record high sales, earnings, and backlog for the fiscal year ended July 1, 1967.

The records were achieved as a result of performance during the final period of fiscal 1967. Sales, up 31%, were \$6,588,900.



John Mundel, new Quality Control director for Memorex, who will have a major responsibility in ensuring the user's satisfaction.

## Disk Packs Here

CONTINUED FROM PAGE 1

get quick delivery along with the drives themselves.

### INDUSTRY REACTION

No real reaction was available officially within the industry, as the Memorex disks were still being tested in the laboratories. Unofficially, it was felt that the emergence of a second supplier would help improve the relationships between IBM and the other computer manufacturers. "They have been in an awkward situation," said one executive, speaking off the record. "They couldn't give us delivery — and everyone thought that they might be holding out on us. It's just human nature to think the worst of the big guy. Now, if these new disks are O.K., then for the real emergencies when we're hurting for a few, we'll be able to get them without putting IBM or ourselves on the spot."

An IBM spokesman, queried about the alleged delays in disk pack deliveries, stated that IBM had lived up to its commitments.

# GE Raids IBM—V.P. And Gen. Mgr.

NEW YORK, Sept. 6 — In two separate operations recently, GE has taken senior people from IBM. Perhaps the more important concerns John W. Haanstra, who will work on the long-range planning and strategic systems tasks of GE's Information Systems Division, reporting to Vice President Stanford Smith. This is an area where GE has recently been weak — and where IBM is strong.

Mr. Haanstra is a veteran of 17 years in the computer industry and has held several top posts at IBM. Most recently he was vice president of IBM's Federal Systems Division and general manager of its Federal Systems Center in Gaithersburg, Md. Previously he was president of IBM's Systems Development Division. He also held posts as vice president for engineering and later president of IBM's General Products Division.

Last week in Paris, Jean-Pierre Brule, an executive from IBM-France, was appointed by Bull-General Electric officials as deputy department general manager for operations.

Mr. Brule will be responsible for marketing, business and product planning and product service for the full range of B-GE's information systems equipment, located in more than 6,000 installations around the world.

Mr. Brule was formerly general manager of IBM's Military Division in France and director of IBM Defense Systems - France, and has 14 years' experience in the European data processing field.



JOHN W. HAANSTRA  
GENERAL ELECTRIC

## Our Cover Story

This weeks cover shows how computers are completing the loop between people — and people.

In this instance the people concerned are students and teachers. Certainly this is a loop which SHOULD be completed — but since the little red school house vanished it has become more and more impractical for students and teachers to stay in close contact with each other.

Computers will not solve this; but they can help alleviate it.

### ANALYSES GIVEN

A computerized educational tool is providing researchers at Syracuse University with new insights into the learning process in large classrooms.

An electronic "Student Response System", designed to provide "instant feedback" to the instructor on the performance and comprehension of his class, and tied directly to a remote, time-sharing General Electric computer in Schenectady, New York, so that individual student responses could be automatically analyzed and recorded for further study by the instructor.

### HOW IT WORKS

Each student in the lecture hall has a set of buttons. This enables the student to respond to multiple choice questions posed by the instructor during brief pauses in a lecture presentation. The results are displayed to the instructor immediately.

### RESULTS

As a result, the instructor has a rapid and effective tool for measuring the effectiveness of his presentation — as he makes it. He knows

whether to continue the pace and content of his lecture, to backtrack and review previously presented material, or to accelerate the pace.

Equally important, the computer can provide the instructor with detailed information about individual student performance. This information — made available to the instructor during or immediately after the class period — enables him to identify and assist students who are having problems.

### TEACHER'S COMMENTS

"Increased student enrollments — coupled with a shortage of instructors have encouraged educators to investigate technology such as the Student Response System as a means of increasing the effectiveness of learning in large lecture halls," according to Dr. DeLayne Hudspeth, of Syracuse University.

He continued, "A major disadvantage of large teaching facilities — even when a well-qualified instructor is available — is the lack of interaction between student and lecturer. In answer to this problem, the Student Response System performs several functions. It enables the instructor to measure total class performance, individual student performance, and his own performance as well."

The Student Response System was developed at the General Electric Research and Development Center, in Schenectady — New York, by E. Lloyd Rivest, manager, Information Systems Programs; Leonidas J. Jones; and Richard W. Rankin.

The Student Response System at Syracuse University is connected via telephone lines to the Center's GE-265 Computer 130 miles away.

## AIR FORCE PRESSURES VENDORS Tripled Cost Guarantee Asked

In an almost unprecedented move, the Air Force stopped the four bidders for the disputed Phase II award from submitting cost figures on schedule on Sept. 1 by wiring them not to do so — and then followed up with a request for price guarantees three as long as was originally requested — six years instead of two. The problem of how long the vendors should guarantee their quotes has been a vexed question; in fact, IBM, the original winner, had seriously considered not even submitting a bid for the Phase II contract because of this problem.

### MAINTENANCE EMPHASIZED

An Air Force spokesman told COMPUTERWORLD today that no real change had been made. "Two years was the mandatory period — and it still is," he said. "We have merely told them what further guarantees we would find desirable." Asked whether he felt he was asking the companies to gamble on the nation's economy, he pointed out that the main area concerned was not in the hardware — but in the maintenance of the systems. Most of the computers are to be delivered within the first two years, but the maintenance will continue for a long time after.

The latest Air Force requirement may bear particularly hard on vendors such as RCA who do not themselves manufacture much of the equipment they are selling. Conversely, it may favor bidders who do — like IBM — have in-house facilities for most if not all of their equipment. It also shows up some of the very basic points which were not covered by the original Air Force planning, and which may come up for Congressional investigation shortly.

In the meantime, manufacturers are preparing for bench-marking once more. The Honeywell bench mark will be particularly watched to see if they can effectively make good their promise to reduce the time needed to handle the work load. During the inquiry which led to the cancellation of the original award, the Air Force said that they felt it was not a simple matter to do so — while Honeywell said that they would be able to manage it.

**THREE WAY DISCUSSION—**Two engineering designers work together with an SDS 940 time-sharing computer terminal to solve a complex problem. SDS 940s are now in use with independent time sharing services in seven major U.S. cities.

## Govt. Buying Inquiry Pressed

WASHINGTON, Sept. 4 — Computerized analysis of the federal budget will be investigated by a second group on Capitol Hill.

Sen. William Proxmire's (D., Wis.) Economy in Government Subcommittee plans public hearings on PPBS (Planning-Programming-Budgeting System) beginning September 14. Previously, the Senate Government Operations Committee's National Security Subcommittee under Sen. Henry Jackson (D., Wash.) held secret hearings.

Senator Proxmire's group, which is part of the Joint Economic Committee, plans to focus on the use of the system in civilian agencies. Case studies will be presented of PPBS in federal agencies, plus state and local applications of the system. A panel of academicians will comment on the importance of monetary factors in amortizing the costs and benefits of public investments.

Future applications of PPBS will be featured in the hearings.

Discussing the importance of the hearings, Senator Proxmire noted that one-fifth of the nation's gross national product (\$170 billion) flows through the federal government either in the form of government purchases or transfer payments.

PPBS has been labeled "a revolutionary means for public decision-making" by its advocates. The senator, however, comments that it is a technique for putting the public at the mercy of "economic planners who are committed to decision-making on the basis of computerized cost-benefit analysis." The hearings are bound to produce another viewpoint.



## BULLETIN BOARD

**NEW YORK, N.Y., Sept. 7** - Realtime Systems Inc., an affiliate of Levin-Townsend Computer Corporation, has purchased a 1.5 million dollar B5500 computer system from the Burroughs Corporation.

Since February, Realtime has been operating a general purpose time-sharing service on a leased Burroughs B5500. Client acceptance of this and the outstanding performance of the B5500 make purchase of the equipment a logical step for them to take at this time.

Owning the B5500 will enable Realtime to further develop and expand its computer network, which already serves over 40 companies.

**SANTA ANA, Sept. 3** - Design and implementation of a USASI COBOL Compiler, including Sort and Report Writer modules, for the Philco 102 Computer is to be supplied by Information Development Company, Santa Ana.

The compiler is designed to allow operation in a disc or tape environment and requires only two passes to go from source program library to binary object code.

**BEDFORD, MASSACHUSETTS, Sept. 5** - Adams Associates has received a \$245,000 extension to its contract with M.I.T.'s Lincoln Laboratory for the purpose of assisting the Laboratory in its continuing research and further development of graphic systems for the Laboratory's TX-2 computer.

**LONDON, ENGLAND, September 6** - Two Real-Time UNIVAC 494 Computer Systems, valued at more than \$3.5 million, have been supplied to British European Airways (BEA) by Sperry Rand Corporation's UNIVAC Division.

The newer 494 Systems replace two UNIVAC 490 Systems, located in the BEA building at the West London Air Terminal, which have been operating the airline's electronic reservations system since April 1965. Added to BEA's existing equipment, the total system will eventually be worth approximately \$14 million.

In addition to handling passenger reservations, the 494s, comprising part of a total system called BEACON (BEA Computerized Office Network), will now begin the extension of the total management information system (IMPACT), envisaged by BEA.

Amongst other activities within IMPACT are flight and crew scheduling, operations control, weight and balance, load control, maintenance scheduling, flight planning, compilation of management report statistics, automatic ticketing, fleet simulations, and many other models.

Walter Cronkite's "Twenty-First Century" (CBS-TV) has scheduled a two part program for September and October viewing highlighting "Computers in Industry". Weston Instruments, Inc., Weston-Hatboro Division, Hatboro, Pennsylvania, has been selected as a featured company for one of the programs. Weston's Hatboro Division was selected because it exemplifies the skillful use of computers as design tools. The company, which manufactures special purpose computers and electrohydraulic control systems, utilizes an IBM QUIKTRAN Terminal and two Systron-Donner SD-80 analog computers in addition to its own 711C Power Spectrum Analyzer.

The viewing date will be September 24.

**PORTLAND, MAINE, Sept. 6** - The Bunker-Ramo Corporation installed its 10,000th Telequote III stock quotation unit today at the Portland office of Hornblower & Weeks-Hemphill, Noyes, one of the nation's leading brokerage firms and members of the New York Stock Exchange. The desk top cathode ray tube device was gold plated to mark the 10,000 milestone.

By pressing a few buttons on the Telequote III keyboard, a broker can obtain the current sale, bid, asked, opening, high, low and closing price of any stock or commodity traded on any major exchange, and certain other market information. The data is instantly retrieved from Bunker-Ramo's computer data bank in lower Manhattan and is displayed on the cathode ray screen in the desk unit. Leased high-speed communications circuits connect each subscriber to the data bank.

**DALLAS, September 6** - Recognition Equipment has received orders during the past two weeks for the purchase or lease of its optical character recognition systems and high-speed sorting equipment valued at approximately \$4.6 million. The group includes orders from American Oil Company, a United States government agency, the American Express Company, Air Canada, and the Automobile Club of Italy.

**PRINCETON, N.J., Aug. 31** - Autoflow, a computer documentation system for producing flowcharts of computer programs, has been selected as one of the 100 most significant new technical products this year by Industrial Research.

The selection of ADR's Autoflow represents the first time in Industrial Research's fifth annual competition that a computer software company had been chosen for a technical development.

**SANTA MONICA, Sept. 4** - Consolidated Analysis Centers, Inc. announces new dates for its Quick Queries courses as follows: Los Angeles, October 30-November 2; Washington, D.C., November 6-9; New York, December 4-7.

## COMPUTERWORLD

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## BEMA To Swing With Computers!

The annual Business Equipment Manufacturers Association show and conference, coming to New York in October, seems to mark a real move-over from the domination of office-type equipment into the acceptance of the computer age. So many of the conference talks are computer-oriented that your visiting management will be able to pick and choose between them on each of the three days of the show - while in the exhibition, the computer area is centered around the Theme Exhibit like a jewel in a crown - as one publicity blurb puts it.

The computer court will have some worthwhile data too. Univac will be displaying a working 9300 (the first time this has been seen). Burroughs will be showing their multi-programming 3500 system, which scored a major triumph in the Boston DPMA show. IBM will have a small system there - but details are not definite.

Honeywell - who certainly stimulated this new emphasis on computers by the spectacular unveiling of the Forget-Me-Not F.R.E.D. computer here last year - will return to orthodox work with a Honeywell 120 on the stand. Last year's effort drew 75% of the attendance to the Honeywell booth - a record which will probably last a long time.

The latest developments in complete computer systems will be shown at BEMA's 9th Annual Business Equipment Exposition. The integrated "Computer Center" will include the complete EDP systems of eight leading systems manufacturers: Burroughs, Control Data Corporation, General Electric, Honeywell EDP, IBM, NCR, RCA and UNIVAC. Through this high-impact, highly convenient arrangement, visitors will be able to gain the answers to their questions regarding developments, potentialities and applicability to their operations.

Exposition authorities have pointed out that the "Computer Center" concept is based upon a firm conviction that across-the-board representation of all systems manufacturers would be desirable. Accordingly, space limitations for the "Computer Center" were set at a minimum of 500 and a maximum of 1,500 square feet. It was foreseen that such space limits would assure that exhibit units would not be of disparate size.

Centered in the three-story-high court of the Coliseum's second floor, at the head of the bank of escalators from the lobby, the "Computer Center" will surround three sides of the



The UNIVAC 9300 data processing system represents the high performance punched card and magnetic tape system for low cost. Featuring a plated-wire memory and monolithic integrated circuitry, the UNIVAC 9300 makes its debut at BEMA in October.

Theme Exhibit. Designed to highlight the Exposition and Management Conference theme, "New Vistas for Progress", the exhibit will also provide a convenient information and message center.

Elsewhere among the 93 exhibits, visitors will find the latest developments in sophisticated mechanical, electro-mechanical and electronic office machines.

In terms of exhibit space occupied,

CONTINUED ON PAGE 6

## CONFERENCE PROGRAM

### EDP Oriented Session In The Conference

#### INTRODUCING EDP TO THE LAYMAN

What The Computer Can Do And What It Cannot Do - How It Works

Elementary Knowledge Of Computer Programming

#### THE DEVELOPING IMPACT OF THE COMPUTER ON U.S. BUSINESS

Will Today's Concepts Of Managing Become Obsolete?

On-Line Time Sharing - Its Potential For Management

Effects Of Computers On Auditing Of Corporate Records

#### PLANNING AND OPERATING A DATA NETWORK

The Development And Operation Of The Internal Revenue Service Network

TOPS - The Westinghouse Teletype Order Processing And Inventory Control System

Economic And Regulatory Considerations In Data Networks

#### THE PRINTING, DUPLICATING AND REPRODUCTION OPERATIONS WITHIN THE OFFICE ORGANIZATION

Impact Of Computers On Printing, Duplicating And Reproduction Programs

Planning, Budgeting And Controlling Reproduction Operations

Effect Of Copyright Law On Office Copying

#### STARTING A DATA PROCESSING PROGRAM IN A SMALL COMPANY

Key Factors To Weigh In Making A Feasibility Study

Staffing And Supervising The EDP Function Within The Company

Anticipating And Handling The Problems Of Conversion To A Computer

#### MAXIMIZING THE USE OF THE COMPUTER AS A MANAGEMENT TOOL

Engaging Top Management In A Continuing Relationship With Computer Operation

Using Computer To Aid Management In Making Operative Decisions

Application Of Computer To Long Range Planning

#### BUILDING DATA BANKS FOR MULTIPLE USES AND ACCESSES

Criteria For Determining Size Of Data Bank

Developing A Data Base For Planning In Marketing And Production

Integrating Divisional Or Departmental Needs Into Corporate System

#### STANDARDS FOR DATA PROCESSING AND OFFICE MACHINES - PROGRESS AND PROMISE FOR AMERICAN BUSINESS

How The USA Standards Institute Operates

USA Standards Institute Standards Committee X3 For Computers And Information Processing

USA Standards Institute Standards Committee X4 For Office Machines

#### HANDLING THE PERSONNEL PROBLEMS IN PROGRAMMING OPERATIONS

Determining Responsibilities And Salary Guidelines

Recruiting And Training Programmers And Supervisors

Evaluating Performance Of Programmers

#### SOURCE DATA AUTOMATION

Decentralized Data Recording

Document Scanning Systems

Combination Data Recording And Transmission Systems

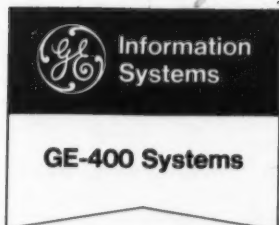
#### INFORMATION STORAGE AND RETRIEVAL DEVELOPMENTS

Advancements In Microfilming Techniques And Operations

Electro-Mechanical And Electronic Equipment

Why Not Send Your Managers Here They Might Learn Something

# Before we announced the GE-400 time-sharing system... We delivered one.



The first GE-400 time-sharing customer already has his system. So we have positive proof it can be delivered fast . . . put on-line fast . . . up and running fast. We can do it for you, too.

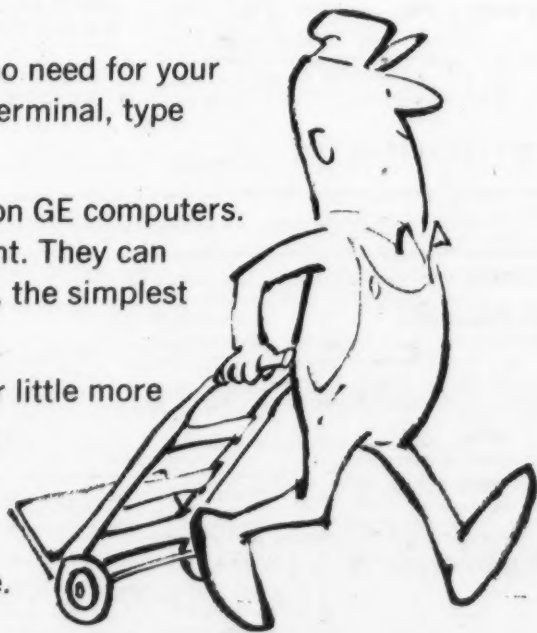
This first member of a family of GE-400 time-sharing computers is called the GE-420. It's so powerful that dozens of people can use it at the same time through separate keyboards.

The keyboards can go anywhere a telephone line can reach. There's no need for your people to wait in line for computer time. They can sit at the nearest terminal, type their problems, and get immediate answers.

Ninety percent of the people who are using time-sharing are doing it on GE computers. Engineers report their productivity has increased by 50 to 500 percent. They can learn to use it in less than a day, because the GE-420 features BASIC, the simplest of all computer languages.

Even though the GE-420 has this time-sharing capability, it leases for little more than a regular batch-processing system. And it can be used for batch processing, when not in time-sharing mode.

To find out how quickly you can be getting the benefits of GE-420 time-sharing, call your GE Information Systems Sales Representative. Or wire General Electric, Room 912, 2721 North Central Avenue, Phoenix, Arizona 85004.



290-13D

GENERAL  ELECTRIC

## BEMA Show To Swing

CONTINUED FROM PAGE 4  
this will be the largest Business Equipment Exposition to date. Natural growth, and the vigor and variety of promotion plans being made by exhibitors and by BEMA, point to total registration this year exceeding by a comfortable margin the 61,656 recorded in 1965 when the Exposition was previously presented in New York. The Exposition will occupy the first floor, the first mezzanine and the second floor of New York City's Coliseum, and will be open afternoon and evening from October 23 through October 27, 1967. Tickets to the Exposition are complimentary, but limited to business people aged 19 years and over.

The in-depth Management Conference, which was successfully inaugurated in conjunction with BEMA's 1966 Business Equipment Exposition, will be conducted this year during the mornings of October 24, 25 and 26. In all, eighteen sessions will be conducted by seventy of the country's foremost experts in electronic data processing, business machines use and office environment design and utilization.

The sessions are seen as opening "New Vistas for Progress" for businessmen who attend the Conference. Speakers and chairmen recruited from major users, consulting firms, government agencies and universities will deal with vital areas of management as related to utilization of the products of the business equipment industry. The eighteen in-depth sessions of the Management Conference, six held concurrently on each of the three mornings,

are to be conducted on the fourth floor of the Coliseum.

Two conference luncheons, on Tuesday, October 24, and Wednesday, October 25, will feature such nationally prominent speakers as Dr. Pierre A.

Rinfret. Described by President Johnson during a 1964 broadcast as a "leading industrial economist", he will address the Tuesday luncheon group. Canadian-born Dr. Rinfret is president of Rinfret-Boston Associates Inc. of New York City, economic and financial consultants to top management of a blue chip list of corporations.

A "First" for this year's Exposition will be the Management Cinema, to be situated on the fourth floor of the Coliseum. Films dealing with various areas of management will be projected from 2:00 to 5:00 P.M., October 24 through 26. Registrants of the Conference or of the Exposition are eligible to attend.

"As business systems have become more sophisticated, as automation has increased and performance of equipment risen, the growth of the total exhibit space, and of the total value of the annual exhibits has been even more rapid," commented Harry C. Anderson, president of Business Equipment Manufacturers Association, the sponsoring organization. "The business equipment industry has often pointed the way to greater efficiency and increased output of other industries. It is on that basis that it has become known as the 'Industry that Serves all Industry'."

## Diebold Computer Leasing Formed With \$85 Million Initial Capital

NEW YORK, September 5 - The formation and private financing of Diebold Computer Leasing, Inc. was announced today by Mr. Ralph Weindling, President of John Diebold Incorporated and Chairman of the Executive Committee of the new company. He stated that the company "is believed to have the largest single credit lines - \$75 million - that a firm of this type has received from one credit source."

Three corporations - Commercial Credit Company, Bankers Leasing Corporation (a wholly owned subsidiary of the Southern Pacific Company) and The Diebold Group, Inc. (a wholly owned subsidiary of John Diebold Incorporated) - have participated in the development of Diebold Computer Leasing, Inc., a new company which has been formed to lease data processing and peripheral equipment.

### Diebold

CONTINUED FROM PAGE 1

uated, and so that clients can be helped in their systems work, as well as in the pure financial area.

The sales representatives of Bankers Leasing were briefed today in their new duties, and appeared enthusiastic at the developments. They were not ignorant of the subject before the briefing, as over \$100 million worth of computers are already held by the firm.

Diebold Computer Leasing, Inc. will specialize in the leasing of third generation computer equipment to businesses located throughout the United States and in Europe. Kuhn, Loeb & Co. and White, Weld & Co. arranged a private placement of \$6 million principal amount of Convertible Subordinated Notes due 1977 and 810,000 shares of Common Stock, for a total of \$10 million. In addition, a subsidiary of the Commercial Credit Company has made available for the U.S. operations \$75 million in the form of a revolving credit.

John Diebold claimed that, "The company is potentially one of the strongest factors in this new industry because of the availability of capital on favorable terms, the leasing experience of Bankers Leasing Corporation, the professional position and experience of The Diebold Group, Inc. and the contemplated European activities."

In commenting on his organization's supplying a \$75 million line of credit to Diebold Computer Leasing, Inc., Mr. Berthold Muecke, Jr., Chairman of Commercial Credit Company, noted that the "leasing of computers and peripheral equipment is by far the largest potential area of leasing business in the United States." The chief executive officer of the diversified financial institution, with assets

in excess of \$2.9 billion, said: "Computers have already begun to bring about great changes in the way we live. They are creating new businesses, adding another dimension to teaching, diagnosing diseases and running hospitals and have begun to revolutionize banking and credit."

The marketing and administration of the lease programs will be performed by Bankers Leasing Corporation, Boston, Massachusetts, a subsidiary of Southern Pacific Company. Bankers Leasing Corporation, headed by Alvin Zises, has arranged leases of more than one-half billion dollars of equipment to American corporations.

Computer leasing firms are comparatively new but they have risen to a position of importance in the data processing field in the past several years. Businesses and other organizations have found it beneficial to deal with such firms because the cost is usually less than leasing equipment from computer manufacturers, because capital funds do not have to be expended to finance the acquisition of the equipment and because short-term leases are a defense against obsolescence.

The growth of computer leasing firms is tied to that of the computer business itself. Computer sales in 1966 totalled \$5 billion, and it is estimated that they will reach \$15 billion per year in the early 1970's.

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The report, which contains one of the first yardsticks for evaluating your level of computerization, can be yours for \$5.00. To get your copy, just write us. We'll bill you, if you like.

**I|D|C** International Data Corporation  
355 Walnut St. Dept. 4-C  
Newtonville, Massachusetts 02160

# • Employment Agencies--Good Or Bad?

By Everett D. Parker Personal Page Editor

Employment agencies, like people, are good and bad. People combine many traits of character and, depending upon the emphasis, we call these people good or bad. The same idea applies to employment agencies. It's hard to find an employment agency that is all good or all bad. Many come close in one way or another, but none is all one way - good or bad.

So quickly do agencies come and go in the field of data processing that it is hard to keep track of them. In Washington, D.C. in 1964 one computer agency had seven counselors. By 1966 five of the original seven had left and established five separate employment agencies. Since mid-1966 several of these agencies had either gone out of business or were under new ownership. According to the National Employment Association the turn-over rate of employment agencies throughout the U.S. is about fifty percent. From all indications the same percentage applies to the world of computers.

## AGENCY

With such uncertainty, how can you decipher which employment agency is good and which is bad? First of all, let's look at an employment agency. What is it? What does it do?

Generally, an employment agency consists of a president, officers, depart-

ment managers and a staff. An agency works at all job levels, though in data processing it will emphasize professional positions beyond the programmer trainee level.

An agency will represent either the job seeker or the company. This causes problems, some of which we shall discuss later. Employment agencies are subject to state laws and must register in each instance according to their geographical locations. The hiring company, rather than the job seeker, normally pays the fee. Agencies differ from search firms which deal on a contract basis with a company and generally seek out executive-level applicants.

## GOOD

What are the good features of an employment agency? There are many. Let's look at a few major ones.

Agencies attract a wide variety of candidates and a broad spectrum of positions with client-companies. If the counselor knows his business, the combination of qualified job seekers and substantial job opportunities works out to everyone's advantage: job seeker, company, and agency.

**CONTACTS** The agency has a large number of "contacts" and a solid reputation for professionalism. The better the agency, the more effective its contacts and vice versa. An agency that has been around for some time and has developed a staff of experienced counselors will best serve the job seeker and the company. It is a paradox, however, that some well-established agencies maintain a high turn-over rate among their counselors and end up, with immature and poorly-informed representatives.

**SAVES TIME** Time-saving is an important aspect of agencies. One's fingers can only do so much walking through the yellow pages. Agencies can help one cover a greater amount of territory in a shorter period of time.

Most agencies have reliable mailing lists to Employment and Personnel Managers in the vicinity. The counselor may even know some of these people personally.

**CONFIDENCE** Working through a reliable and professional agency, both job seeker and company can negotiate in security and confidence. A mature and experienced counselor can advise both the job seeker and the company.

If he knows his job, the counselor will wisely bring together the best applicant and the most suitable job. This, of course, should be the intent and purpose of an employment agency. It isn't always. Why?

## BAD

**TIME** Every job has an enemy. Doctors fight disease, football players contend with the opposition, employment agencies work against time. In the world of employment agencies, high-volume placement is what counts. Agencies live and die on placement fees. To be less than expeditious is suicide in the placement field. Applicants seek other avenues of employment, jobs get filled or dissolved, if not filled quickly. By necessity agencies are eager to make a placement. When this desire becomes an overwhelming concern it frequently clouds the judgment and good sense of the counselor.

The result can be an unhappy or poorly chosen job. Beware of eager counselors! This caution applies to companies as well as to managers of employment agencies.

**FEE PAID** A serious conflict within the heart of a professional job counselor is in serving the needs of the job seeker when the receiving company will actually pay the fee. Unfortunately loyalty is more frequently tied to money than to professionalism. The employment counselor faces this conflict daily and so many times finds himself more responsive to the fee-paying company than to the job-seeking applicant. The only answer to this riddle is for the job seeker to show more than a cursory interest in his future when he applies to an agency. The applicant should make it clear that he expects professional and dignified consideration.

**CUTS CORNERS** Other methods by which you can tell if the agency is doing its job is to note the age and experience of the counselors, the accuracy of their records via referral to jobs that no longer exist or reference to names of people who no longer have the positions specified. If a counselor is unclear about the position requirements, chances are he has not done his homework.

## THE ANSWER

**COUNSELOR** When we come to the end of a discussion about employment agencies, there is really only one person we must rely on - the employment counselor. If this man is a professional, he will give helpful suggestions for a resume, tips on how to be

## Personal Page

interviewed, what to look for in a company. He will have reliable contact information, and in major firms he may even know the Personnel Manager. He will fill you in on the company's salary program and benefit package. His experience with others helps him to instruct and guide you.

If the counselor is a professional, he will direct the job seeker to the right job, and present to the fee-paying company its money's worth in talent and loyalty.

Employment agencies are good and bad because their counselors are good and bad. People run the employment business. Perhaps the above pointers will help you judge the agencies which can help you and, above all, the counselors who will respond creatively and professionally to your needs - company or job seeker.

Send in your comments. We'll print them - whatever your point of view, subject of course to editorial judgment and seemly language.

Everett D. Parker

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